WHAT IS CLAIMED IS:

1. A method for enhanced decision making based on optimization of a drilling system using an economic evaluation factor comprising:

generating a first economic evaluation factor for the drilling system by using an iterative drilling simulation of a well bore in a formation based on a prescribed drilling simulation model, wherein the drilling system including a drilling mechanics parameter;

determining whether the first economic factor achieves a desired optimization; and

based on the determination, varying the drilling mechanics parameter of the drilling system such that the iterative drilling simulation generates a second economic evaluation factor and determines whether the second economic evaluation factor achieves the desired optimization.

2. The method of Claim 1, wherein the drilling mechanics parameters comprise at least one drill bit input selected from a group consisting of bit type, bit diameter, bit cutting structure 3D (three dimensional) model, bit work rating, bit junk slot area, bit total flow area (TFA), bit pressure drop, impact force, jet velocity and drill bit costs.

3. The method of Claim 1, further comprising modifying the iterative drilling simulation to take into account drill bit enhancements.

4. The method of Claim 1, further comprising generating a preliminary recommendation including a list of drilling equipment based on the drilling mechanics parameter of the drilling system that generated the economic evaluation factor that achieved the desired optimization.

5. The method of Claim 4, further comprising displaying the preliminary recommendation.

6. The method of Claim 4, further comprising viewing the preliminary recommendation on a computer monitor.

7. The method of Claim 4, further comprising specifying additional drilling equipment considerations for use with the drilling system of the preliminary recommendation such that the iterative drilling simulation generates a third economic evaluation factor for an additional preliminary recommendation.

8. The method of Claim 7, wherein additional drilling equipment considerations comprise potential component changes.

9. The method of Claim 7, wherein additional drilling equipment considerations comprise replacing a drill bit used in the drilling rig system.

10. The method of Claim 7, further comprising selecting an overall recommendation from the preliminary recommendation and the at least one additional preliminary recommendations based on the economic evaluation factor.

11. The method of Claim 10, further comprising displaying the overall recommendation in a compressed time animation, wherein a user may view a simulation of the drilling system drilling the well bore.

12. The method of Claim 10, further comprising formatting the overall recommendation in hardcopy, CD ROM, computer readable media, electronic file, holographic projection, compressed time animation, or any combination thereof.

13. A program product for enhanced decision making to recommend a drilling rig system using an economic evaluation factor to achieve a desired optimization of the drilling rig system comprising:

a computer-usable medium; and

computer instructions encoded in the computer-usable medium, wherein the computer instructions, when executed, cause a computer to perform operations comprising:

generating a first economic evaluation factor for a drilling rig system by using an iterative drilling simulation of a well bore in a formation based on a drilling simulation model;

including a drilling mechanics parameter in the drilling simulation model;

determining whether the first economic factor achieves a desired optimization; and

based on the determination, varying the drilling mechanics parameter such that the drilling simulation model generates a second economic evaluation factor and determines whether the second economic evaluation factor achieves the desired optimization.

14. The program product of Claim 13, wherein varying the drilling mechanics parameter comprises modifying at least one drill bit input selected from a group consisting of bit type, bit diameter, bit cutting structure 3D (three dimensional) model, bit work rating, bit junk slot area, bit total flow area (TFA), bit pressure drop, impact force, jet velocity and drill bit costs.

15. The program product of Claim 13, further comprising modifying the iterative drilling simulation to take into account drill bit enhancements.

16. The program product of Claim 13, further comprising generating a preliminary recommendation including a list of drilling equipment based on the drilling mechanics parameter that achieved the desired optimization.

17. The program product of Claim 16, further comprising displaying the preliminary recommendation.

18. The program product of Claim 16, further comprising viewing the preliminary recommendation on a computer monitor.

19. The program product of Claim 16, further comprising specifying an additional drilling equipment consideration for use with the drilling rig system of the preliminary recommendation such that the iterative drilling simulation generates a third economic evaluation factor for an additional preliminary recommendation.

20. The program product of Claim 19, further comprising including potential drilling rig upgrades as the additional drilling equipment consideration.

21. The program product of Claim 19, further comprising replacing a drilling rig component used in the drilling rig system as the additional drilling equipment consideration.

22. The program product of Claim 19, further comprising selecting an overall recommendation from the preliminary recommendation and the at least one additional preliminary recommendations based on the economic evaluation factor.

23. The program product of Claim 22, further comprising displaying the overall recommendation in a compressed time animation, wherein a user may view a simulation of the drilling rig system drilling the well bore.

24. The program product of Claim 22, further comprising formatting the overall recommendation in hardcopy, CD ROM, computer readable media, electronic file, holographic projection, compressed time animation, or any combination thereof.

25. A method of enhanced decision making for the recommendation of a drill bit for a drilling system based on an economic evaluation factor comprising:

generating a first economic evaluation factor for the drilling system by using an iterative drilling simulation of a well bore in a formation based on a drilling mechanics parameter of a drill bit used in the drilling rig system;

determining whether the first economic factor achieves a desired optimization;

based on the determination, varying the drilling mechanics parameter of the drill bit such that the iterative drilling simulation generates a second economic evaluation factor and determines whether the second economic evaluation factor achieves the desired optimization; and

generating a preliminary recommendation based on the economic evaluation factor that achieved the desired optimization, the preliminary recommendation including a list of drilling components, such as the drill bit, for use in the drilling system.

26. The method of Claim 25, selecting the drilling mechanics parameter of the drill bit from a group consisting of a bit type, bit diameter, bit cutting structure 3D (three dimensional) model, bit work rating, bit junk slot area, bit total flow area (TFA), bit pressure drop, impact force, jet velocity and drill bit costs.

27. The method of Claim 25, further comprising modifying the iterative drilling simulation to take into account drill bit enhancements.